

Claims

What is claimed is:

1. A proximal actuator removably attachable to an elongated actuation sleeve having a proximal end and a distal end, the proximal end is divided into a first section and a second section and the distal end carries a medical device thereat, the proximal actuator comprises:
a first retaining device laterally removably attachable to the first section; and
a second retaining device laterally removably attachable to the second section, wherein the second retaining device is moveable relative to the first retaining device such that the medical device is activated.
2. The proximal actuator according to claim 1, further comprising a grip portion having a sleeve defining an aperture, wherein the first retaining device is affixed to the sleeve.
3. The proximal actuator according to claim 2, further comprising a sliding member including a first end and a second end, wherein the first end of the sliding member is positionable through the aperture of the sleeve.
4. The proximal actuator according to claim 3, wherein the second retaining device is affixed to the second end of the sliding member.
5. The proximal actuator according to claim 4, wherein the first end of the sliding member is threaded.
6. The proximal actuator according to claim 5, further comprising a control actuator moveably engaging the threaded first end of the sliding member within the aperture, such that the control actuator moves the second retaining member from a first position to a second position relative to the first retaining member.

7. The proximal actuator according to claim 1, wherein the first retaining device is in a fixed position.

8. The proximal actuator according to claim 7, wherein the second retaining device is longitudinally movable from a first position to a second position relative to the first retaining member.

9. The proximal actuator according to claim 1 wherein said medical device has at least two a first and a second positional state, said first and second sections moving said medical device to one of said first and said second positional states based upon the movement therebetween.

10. The proximal actuator according to claim 1 wherein said actuator is mounted over a guide wire.

11. The proximal actuator according to claim 1, wherein the first retaining device is a first spring loaded clip.

12. The proximal actuator according to claim 11, wherein the first spring loaded clip comprises a first alignment indicator.

13. The proximal actuator according to claim 11, wherein the second retaining device is a second spring loaded clip.

14. The proximal actuator according to claim 13, wherein the second spring loaded clip comprises a second alignment indicator.

15. The proximal actuator according to claim 1 wherein a wire extends through said actuator sleeve, said wire having a proximal and a distal end, said proximal end of said wire being attached to said second section of said actuator sleeve.

16. A proximal actuator removably attachable to a first elongated movable member and a second elongated movable member, said first and second movable members adapted

to move longitudinally with respect to each other, said first and second movable members having proximal and distal portions, a medical device mounted on said distal portions of both said first and second movable members, the proximal actuator comprising:

a first retaining device laterally removably attachable to the first movable member;

and

a second retaining device laterally removably attachable to the second movable member, wherein the second retaining device is moveable relative to the first retaining device such that as the first movable member slides over the second movable member to activate said medical device.

17. A proximal actuator according to claim 16 wherein said first movable member is an actuation sleeve and said second movable member is a wire.

18. A deployment handle removably attachable to an expandable device employed during catheterization, the expandable device including an actuation sleeve having a proximal end and a distal end, the proximal end is divided into a first section and a second section and the distal end has a expandable frame for capturing embolic material, the deployment handle comprises:

a first retaining device removably attachable to the first section; and

a second retaining device removably attachable to the second section, wherein the second retaining device is moveable relative to the first retaining device such that the expandable frame is opened and closed.

19. The deployment handle according to claim 18, further comprising a grip portion having a sleeve defining an aperture, wherein the first retaining device is affixed to the sleeve.

20. The deployment handle according to claim 19, further comprising a sliding member including a first end and a second end, wherein the first end of the sliding member is positionable through the aperture of the sleeve.

21. The deployment handle according to claim 20, wherein the second retaining device is affixed to the second end of the sliding member.

22. The deployment handle according to claim 21, wherein the first end of the sliding member is threaded.

23. The deployment handle according to claim 22, further comprising a control actuator moveably engaging the threaded first end of the sliding member within the aperture, such that the control actuator moves the second retaining member from a first position to a second position relative to the first retaining member.

24. The deployment handle according to claim 18, wherein the first retaining device is in a fixed position.

25. The deployment handle according to claim 24, wherein the second retaining device is movable from a first position to a second position relative to the first retaining member.

26. The deployment handle according to claim 25, wherein when the second retaining device is in the first position, the expandable frame is in a closed configuration.

27. The deployment handle according to claim 25, wherein when the second retaining device is in the second position, the expandable frame is in an open configuration.

28. The deployment handle according to claim 18, wherein the first retaining device is a first spring loaded clip.

29. The deployment handle according to claim 28, wherein the first spring loaded clip comprises a first alignment indicator.

30. The deployment handle according to claim 28, wherein the second retaining device is a second spring loaded clip.

31. The deployment handle according to claim 30, wherein the second spring loaded clip comprises a second alignment indicator.

32. A deployment handle removably attachable to an expandable device employed during catheterization, the expandable device including an actuation sleeve having a proximal end and a distal end, the proximal end is divided into a first section and a second section and the distal end includes an expandable frame for capturing embolic material, the deployment handle comprising:

a grip portion including a sleeve defining an aperture;

a first retaining device affixed to the sleeve and removeably attachable to the first section of the proximal end of the actuation sleeve;

a sliding member including a first end and a second end, the first end of the sliding member is positionable through the aperture of the sleeve;

a second retaining device affixed to the second end of the sliding member and removeably attachable to the second section of the proximal end of the actuation sleeve; and

a control actuator moveably engaging the first end of the sliding member within the aperture, such that the control actuator moves the second retaining member from a first position to a second position relative to the first retaining device such that the expandable frame is opened and closed.

33. The deployment handle according to claim 32, wherein when the second retaining device is in the first position, the expandable frame is in a closed configuration.

34. The deployment handle according to claim 32, wherein when the second retaining device is in the second position, the expandable frame is in an open configuration.

35. The deployment handle according to claim 32, wherein the first retaining device is a first spring loaded clip.

36. The deployment handle according to claim 35, wherein the first spring loaded clip comprises a first alignment indicator.

37. The deployment handle according to claim 32, wherein the second retaining device is a second spring loaded clip.

38. The deployment handle according to claim 37, wherein the second spring loaded clip comprises a second alignment indicator.

39. A deployment handle removably attachable to an expandable device, the expandable device including a wire member and an actuation sleeve slidably disposed about the wire member, the actuation sleeve having an expandable frame for capturing embolic material, the deployment handle comprising:

a first retaining device removably attachable to the actuation sleeve; and

a second retaining device removably attachable to the wire member, wherein the second retaining device is moveable relative to the first retaining device such that as the actuation sleeve slides over the wire member the expandable frame is opened and closed.

40. The deployment handle according to claim 39, further comprising a grip portion having a sleeve defining an aperture, wherein the first retaining device is affixed to the sleeve.

41. The deployment handle according to claim 40, further comprising a sliding member including a first end and a second end, wherein the first end of the sliding member is positionable through the aperture of the sleeve.

42. The deployment handle according to claim 41, wherein the second retaining device is affixed to the second end of the sliding member.

43. The deployment handle according to claim 42, wherein the first end of the sliding member is threaded.

44. The deployment handle according to claim 43, further comprising a control actuator moveably engaging the threaded first end of the sliding member within the aperture, such that the control actuator moves the second retaining member from a first position to a second position relative to the first retaining member.

45. The deployment handle according to claim 39, wherein the first retaining device is in a fixed position.

46. The deployment handle according to claim 39, wherein the second retaining device is movable from a first position to a second position relative to the first retaining member.

47. The deployment handle according to claim 46, wherein when the second retaining device is in the first position the expandable frame is in a closed configuration.

48. The deployment handle according to claim 46, wherein when the second retaining device is in the second position the expandable frame is in an open configuration.

49. The deployment handle according to claim 39, wherein the first retaining device is a first spring loaded clip.

50. The deployment handle according to claim 49, wherein the first spring loaded clip comprises a first alignment indicator.

51. The deployment handle according to claim 49, wherein the second retaining device is a second spring loaded clip.

52. The deployment handle according to claim 51, wherein the second spring loaded clip comprises a second alignment indicator.